

March 7, 2006

**Race, Sex, and Business Enterprise:  
Evidence from the State of Maryland  
(Final Report Executive Summary)**

Prepared for the Maryland Department of Transportation



**NERA**

Economic Consulting

## Project Team

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## Acknowledgments

This Study would not have been possible without the active assistance of State of Maryland officials, employees, and others far too numerous to mention here. We would be remiss, however, if we did not thank specifically, Maryland Department of Transportation (MDOT) Deputy Director of Audits Larry Kinard and his staff, MDOT Project Manager Trent Rawley, MDOT Secretary Robert Flanagan, MDOT Deputy Secretary Jim Ports, MDOT Assistant Secretary Debra Carter, Director, MDOT Office of Minority Business Enterprises (OMBE) Katie Knowlin, Governor's Office of Minority Affairs (GOMA) Executive Director Sharon Pinder, GOMA Deputy Director Herb Jordan, GOMA Assistant Secretary John Petty, Assistant Attorney General John Bell, Assistant Attorney General Zenita Wickham Hurley, Attorney William Kahn (retired), MDOT Assistant Director, Office of Finance Steven P. Watson, MDOT Chief Procurement Officer Mark Pemberton, and University of Maryland Professor Paul Smith.

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## About the Project Team—NERA Economic Consulting

**NERA Economic Consulting** is an international firm of economists who understand how markets work. We provide economic analysis and advice to corporations, governments, law firms, regulatory agencies, trade associations, and international agencies. Our global team of more than 500 professionals operates in 19 offices across North and South America, Europe, Asia, and Australia.

NERA provides practical economic advice related to highly complex business and legal issues arising from competition, regulation, public policy, strategy, finance, and litigation. Our more than 40 years of experience creating strategies, studies, reports, expert testimony, and policy recommendations reflects our specialization in industrial and financial economics. Because of our commitment to deliver unbiased findings, we are widely recognized for our independence. Our clients come to us expecting integrity; they understand this sometimes calls for their willingness to listen to unexpected or even unwelcome news.

NERA's employment and labor experts advise clients on a wide range of issues both inside and outside the courtroom. We have provided expert testimony on statistical issues both at the class certification phase (on issues of commonality and typicality) and at the liability phase (for class or pattern-and-practice cases). Our experts have extensive experience examining issues of statistical liability in discrimination and other wrongful termination claims. We also provide detailed statistical analyses of workforce composition to identify potential disparities in hiring, layoffs, promotions, pay, and performance assessments and have conducted studies on labor union issues and on affirmative action programs for historically disadvantaged business enterprises.

The NERA project team for this Study was led by NERA Vice President Dr. Jon Wainwright. Dr. Wainwright is a nationally recognized expert on business discrimination and affirmative action and has testified in state and federal court on these issues. He is the author of one book, a National Bureau of Economic Research Working Paper, and numerous research studies on the subject. At NERA, Dr. Wainwright directs and conducts economic and statistical studies of discrimination for attorneys, corporations, governments, and non-profit organizations. He also directs and conducts research and provides clients with advice on adverse impact and economic damage matters arising from their hiring, performance assessment, compensation, promotion, termination, or contracting activities.

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## About the Project Team—NERA Research Partners

**Colette Holt & Associates** is a Chicago-based law practice specializing in public sector affirmative action programs. The firm provides legal and consulting services to governments and businesses relating to procurement and contracting; employment discrimination; regulatory compliance; organizational change; program development, evaluation and implementation; and issues relating to inclusion, diversity and affirmative action. Colette Holt, J.D. is a nationally recognized expert in designing and implementing and legally defensible affirmative action programs and is a frequent author and media commentator in this area. On this Study, Colette Holt served as legal counsel, providing advice and recommendations for the study's design and implementation, conducting the review of Maryland policies and procedures, conducting interviews with business owners and with state personnel, and drafting key study findings, among other duties.

**NERA Special Consultant Professor David G. Blanchflower** is an internationally recognized labor economist and one of the prominent economists of his generation. He is the Bruce V. Rauner '78 Professor of Economics at Dartmouth College. He was Chairman of the Department of Economics at Dartmouth during 1998–2000 and the Associate Dean of the Faculty for the Social Sciences during 2001–2002. Professor Blanchflower is the author or co-author of six books and dozens of articles. His work is widely cited in the labor economics literature and his publications have appeared in the *Quarterly Journal of Economics*, *The Economic Journal*, *Industrial and Labor Relations Review*, *Review of Economics and Statistics*, *The Journal of Economic Perspectives*, *The European Economic Review*, *The Journal of Public Economics*, *Journal of Japanese and International Economies*, *Labour Economics* and *The Journal of Labor Economics*, among others. Dr. Blanchflower has worked as an expert economist in litigation on several cases concerning contracting affirmative action. On this Study, Dr. Blanchflower co-authored the research concerning credit discrimination, business formation disparities, and business owner earnings disparities.

**Anchondo Research, Management & Strategies (ARMS)** provides research, management and strategic planning to clients in Texas, Colorado, Massachusetts, Maryland, and other markets throughout the country. ARMS President J. Jorge Anchondo has over 25 years of public policy consulting experience, and has been working on public contracting and procurement-related issues for more than 15 years. He has conducted disparity studies and related activities and advised governments that are conducting disparity studies or implementing revised MBE programs. On this Study, ARMS provided logistical and technical assistance for the business owner interview sessions and the state personnel MBE program feedback sessions conducted throughout the State.

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## About the Project Team—NERA Research Partners, Cont'd

**Bert Smith & Co. (BSC)** is a full-service Maryland-licensed certified public accounting and management consulting firm, in business since 1948, with offices in Baltimore and in Washington, DC. BSC is one of the largest accounting firms in the Washington, D.C. metropolitan area. Their client base includes federal government agencies, state and local governments, non-profit organizations, colleges and universities and commercial businesses. On the Study, Bert Smith was responsible for collecting first-tier subcontracting records for a sample of the State's recent prime contracts. The BSC team was led by Partner Dorothy Page Proctor, CPA.

**Strategic Solutions Center, LLC (SSC)** is a Maryland-based management consulting firm providing services to both private and public sector clients in 12 states. SSC President Major Riddick has extensive familiarity with Maryland's finance, procurement, and MBE programs, both in their administration and legislative history, having served as Chief of Staff in the Office of the Governor from 1995-2001, and as Budget Director and Chief Administrative Officer of Prince George's County from 1986-1995. On this Study, SSC provided logistical and technical assistance for the business owner interview sessions conducted throughout the State.

**Schulman, Ronca & Bucuvalas, Inc. (SRBI)** is a New York-based small business with a national reputation for excellence in computer assisted telephone interviewing. SRBI provides analysis in the rapidly evolving markets and public policy areas of communications, financial services, utilities, transportation, media, health and business services. The firm was founded in 1981 with the explicit purpose of combining high quality analytic capabilities with in-house control of the research implementation to ensure accurate, timely and actionable research use by decision makers working in rapidly changing environments. SRBI clients include the Eagleton Institute at Rutgers, the Annenberg Institute at the University of Pennsylvania, and the major networks. SRBI has conducted numerous surveys of MBEs and non-MBEs for NERA over the past six years. On this Study, SRBI conducted telephone surveys of race and gender misclassification and of mail survey non-response under the supervision of SRBI Project Manager Andrew Evans.

**J&D Data Services (JDDS)** is a small business enterprise owned by Mr. Joe Deegan and based in Plano, Texas. After a long career with ScanTron, Mr. Deegan started his own business to offer a solid and proven alternative to the time consuming and expensive job of key data entry long associated with mail surveys. JDDS helps its clients conserve their surveying resources by designing and delivering survey instruments that can be electronically and automatically scanned upon return and sent directly to electronic format. JDDS has conducted numerous surveys of MBEs and non-MBEs for NERA over the past six years. On this assignment JDDS provided printing, postage, mail-out and mail-back service for two large scale mail surveys and one large scale mailing of business owner interview invitations.

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### I. Introduction and Executive Summary

#### A. Introduction

Like many local governments, the State of Maryland has a long record of commitment to including minority-owned and women-owned business enterprises (“MBEs”) in its contracting and procurement activities. As will be documented in this Study, from 2000-2004 the State has continued to be a significant source of demand for the products and services produced by MBE firms—demand that, in general, is found to be lacking in the private sector of the Maryland economy.

The courts have made it clear, however, that in order to implement a race- and gender-based program that is effective, enforceable, and legally defensible, Maryland must meet the judicial test of constitutional “strict scrutiny” to determine the legality of such initiatives. Strict scrutiny requires current “strong evidence” of the persistence of discrimination, and any remedies adopted must be “narrowly tailored” to that discrimination.

Based in part upon a prior MBE Study by NERA Economic Consulting, the State enacted a revised MBE statute in 2001 that increased the MBE goal from 14 percent to 25 percent and set a sunset date of July 1, 2006.<sup>1</sup> In 2001, in an effort to insure continued narrow tailoring of the Program, the State imposed a personal net worth limit on MBE Program eligibility of \$750,000, following the example set by the U.S. Department of Transportation’s Disadvantaged Business Enterprise Program.<sup>2</sup> In 2004, this limit was raised to \$1,500,000.

In 2002, a Performance Audit of the MBE Program was completed by the Office of Legislative Audits. The report identified several weaknesses in the MBE Program:

- MBE utilization data were often not supported or inconsistent with reporting guidelines;
- Actual payments to MBEs were not always used as the measure of Program success; and
- State agencies did not adequately monitor MBE participation on contracts.

In response, Governor Robert L. Ehrlich, Jr., elevated the Director of the Governor’s Office of Minority Affairs (GOMA), to Special Secretary and also issued an Executive Order creating the Governor’s Commission on MBE Reform. The Commission was chaired by Lieutenant Governor Michael S. Steele and staffed by GOMA. It made several important recommendations that have been incorporated into the operation of the MBE Program and resulted in the Small Business Reserve Program.

To further ensure continuing compliance with constitutional mandates and MBE best practices, in December 2004 the State again commissioned NERA to examine the past and current status of MBEs in Maryland’s geographic and product markets for contracting and procurement. The

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<sup>1</sup> House Bill 306 (2001), codified at State Finance and Procurement Article, Section 14-301 *et seq.*, Annotated Code of Maryland.

<sup>2</sup> House Bill 483 (2004); *see* 49 CFR §26.67(a)(2)(i).

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results of NERA's Study, summarized below, provide the evidentiary record necessary to implement renewed MBE policies that comply with the requirements of the courts and to assess the extent to which previous MBE policies have assisted MBEs in participating in Maryland's contracting and procurement activity.

The Study found both statistical and anecdotal evidence of business discrimination against MBEs in the private sector of the Maryland marketplace. As a check on our statistical findings, we surveyed the contracting experiences and credit access experiences of MBEs and non-MBEs in the Maryland marketplace and conducted a series of in-depth personal interviews with Maryland business enterprises, both MBE and non-MBE. Statistical analyses of Maryland's public sector contracting behavior are confirmed in Chapters III, IV and VII.

The Study is presented in 10 chapters. Chapter I contains this Executive Summary and overview of the Study. Chapter II provides a detailed overview of the current legal standards regarding public sector affirmative action programs. The remaining Chapters address the following questions:

- Chapter III: How are goods and services contracted for and/or procured under Maryland statutes and regulations? What is the relevant geographic market and how is it defined? What are the relevant product markets and how are they defined?
- Chapter IV: What percentage of all businesses in Maryland's relevant markets are owned by minorities and/or women? What percentage are "small" versus "large"? How are these availability estimates constructed?
- Chapter V: Do minority and/or female wage and salary earners earn less than similarly situated White males? Do minority and/or female business owners earn less from their businesses than similarly situated White males? Are minorities and/or women in Maryland less likely to be self-employed than similarly situated Whites males? How do the findings in Maryland differ from the national findings on these questions? How have these findings changed over time?
- Chapter VI: Do minorities and/or women face discrimination in the market for commercial capital and credit compared to similarly-situated White males? How do findings for Maryland differ from findings nationally?
- Chapter VII: During the last five years, to what extent have MBEs been utilized by Maryland, and how does this utilization compare to the availability of MBEs in the relevant marketplace?
- Chapter VIII: How many MBEs report disparate treatment in the last five years? What types of discriminatory experiences are most frequently encountered by MBEs? How do the experiences of MBEs differ from those of non-MBEs regarding the difficulty of obtaining contracts?



Chapter IX: What race-neutral and gender-neutral activities are currently being undertaken by the State? How does the State's MBE program operate? What were some of the most frequently encountered comments from State personnel and from MBEs and non-MBEs concerning MBE program operations?

Chapter X: What are NERA's recommendations for the State based on the findings of the Study in Chapters II-IX?

In assessing these questions, we present in Chapters IV through VIII a series of quantitative and qualitative analyses that compare minority and/or female outcomes to non-minority male outcomes in all of these business-related areas. The remainder of this Executive Summary provides a brief overview of each Chapter and its key findings and conclusions, where applicable.

### **1. Legal Standards for Government Affirmative Action Contracting Programs**

Chapter II provides a detailed and up-to-date overview of current constitutional standards and case law on strict scrutiny of race-conscious government efforts in public contracting. The elements of Maryland's compelling interest in remedying identified discrimination and the narrow tailoring of its programs to address that important government concern are delineated, and particular judicial decisions, orders, statutes, regulations, etc. are discussed as relevant, with emphasis on critical issues and evidentiary concerns. Examples include the proper tests for examining discrimination and the role of disparities, the applicability of private sector evidence, and Maryland's responsibility for narrowly tailoring of its MBE Program.

### **2. Defining the Relevant Markets**

Chapter III describes Maryland's current procurement environment for the six major procurement categories under consideration in the Study—Construction; Architecture, Engineering and Construction-Related Services; Commodities, Supplies, and Equipment; Information Technology; Maintenance; and Services.

This Chapter next describes how the relevant geographic and product markets were defined for this Study. A large and statistically representative sample of records of public contracts and associated subcontracts gathered from the State and its prime contractors, consultants, and vendors was analyzed to determine the geographic radius around the State that accounts for at least 75 percent of aggregate contract and subcontract spending over the last five years. These records were also analyzed to determine approximately 70 detailed industry categories collectively account for at least 75 percent of contract and subcontract spending over the last five years in the relevant procurement categories. The relevant geographic and product markets were then used to focus and frame the quantitative and qualitative analyses in the remainder of the Study.

The State's relevant geographic market was determined to consist of the State of Maryland, the State of Delaware, and the Washington, DC Metropolitan Statistical Area (including the District of Columbia, the State of Maryland, and parts of Virginia and West Virginia).

### B. Statistical Evidence

The *Croson* decision and most of its progeny have held that statistical evidence of disparities in business enterprise activity is a requirement for any state or local entity that desires to establish or maintain race-conscious, ethnicity-conscious, or gender-conscious MBE requirements. Chapter IV estimates current availability levels in Maryland for MBEs in various industry groups. Chapters V and VI document in considerable detail the extent of disparities facing MBEs in the private sector, where contracting and procurement activities are rarely subject to MBE requirements. Chapter VII examines whether there is statistical evidence of disparities in the contracting and subcontracting activities of Maryland itself.

#### 1. MBE Availability in the State of Maryland's Marketplace

Chapter IV estimates the percentage of firms in Maryland's relevant marketplace that are owned by minorities and/or women. For each industry category, MBE availability is defined as the number of MBEs divided by the total number of businesses in Maryland's contracting market area. Determining the total number of businesses in the relevant markets is more straightforward than determining the number of minority-owned or women-owned businesses in those markets. The latter task has three main parts: (1) identify all listed MBEs in the relevant market; (2) verify the ownership status of listed MBEs; and (3) estimate the number of unlisted MBEs in the relevant market.

We used Dun & Bradstreet's *MarketPlace* database to determine the total number of businesses operating in the relevant geographic and product markets. *MarketPlace* is the most comprehensive available database of U. S. businesses. *MarketPlace* contains over 13 million records, is updated continuously, and revised each quarter. For this Study, we used data for the third quarter of 2005. We used the *MarketPlace* database to identify the total number of businesses in each four-digit Standard Industrial Classification (SIC) code to which we had anticipated assigning a product market weight. Industry weights reflect Maryland's prime contracts and associated subcontracts awarded and substantially completed during FY2000-FY2004.

While extensive, *MarketPlace* does not sufficiently identify all businesses owned by minorities or women. Although many such businesses *are* correctly identified in *MarketPlace*, experience has demonstrated that many more are missed. For this reason, several additional steps were required to identify the appropriate percentage of MBEs in the relevant market. First, NERA completed an intensive regional search for information on minority-owned and woman-owned businesses in Maryland and surrounding areas. Beyond the information already in *MarketPlace*, NERA collected listings of MBEs from Maryland itself as well as from numerous other public and private entities in and around Maryland. The MBE businesses identified in this manner are referred to as "listed" MBEs.

If the listed MBEs we identified are *all* in fact MBEs and are the *only* MBEs among all the businesses identified, then an estimate of "listed" MBE availability is simply the number of listed MBEs divided by the total number of businesses in the relevant market. However, neither of these two conditions holds true in practice and therefore this is not an adequate method for measuring MBE availability for two reasons. First, it is likely that some proportion of the MBEs

listed in the tables are not actually minority-owned or woman-owned. Second, it is likely that there are additional “unlisted” MBEs among all the businesses included in our baseline business population. Such businesses do not appear in any of the directories we gathered, and are therefore not included as “listed” MBEs.

To account for this, we conducted a supplementary telephone survey on a stratified random sample of firms in our baseline business population that asked them directly about the race and sex of the firm’s primary owner(s). We used the results of this survey to statistically adjust our estimates of MBE availability for misclassification by race and sex. The resulting estimates of MBE availability are presented at the end of Chapter IV and were used in Chapter VII for disparity testing compared to Maryland’s own contracting and subcontracting activity over the last five years. These availability figures can also be averaged together to provide guidance on overall goal setting.

Table A below provides a top-level summary of the MBE availability estimates derived in this Study.

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**Table A. Overall Availability—All Procurement Categories Combined**

Detailed Industry	Black	Hispanic	Asian	Native American	White Female	MBE	Non-MBE
CONSTRUCTION	6.09	2.95	2.21	0.49	12.26	24.00	76.00
ARCHITECTURE, ENGINEERING & CONSTRUCTION- RELATED SERVICES	5.80	2.79	7.22	0.45	12.20	28.46	71.54
COMMODITIES, SUPPLIES, & EQUIPMENT	6.91	3.43	7.49	0.81	16.60	35.24	64.76
INFORMATION TECHNOLOGY	12.18	4.23	9.82	0.95	16.24	43.42	56.58
MAINTENANCE	8.11	3.34	3.24	0.56	14.81	30.06	69.94
SERVICES	6.15	3.39	6.42	0.80	17.66	34.42	65.58
<i>TOTAL</i>	6.49	3.17	4.76	0.63	14.56	29.61	70.39

Source: See Table 4.23.

## 2. Statistical Disparities in Minority and Female Business Formation and Business Owner Earnings

Chapter V demonstrates that current MBE availability levels in Maryland, as measured in Chapter IV, are substantially and statistically significantly lower than those that would be expected to be observed if commercial markets operated in a race- and sex-neutral manner.<sup>3</sup> This

<sup>3</sup> Typically, for a given disparity statistic to be considered “statistically significant” there must be a substantial probability that the value of that statistic is unlikely to be due to random chance alone. See also *fn. Error! Bookmark not defined.*

suggests that minorities and women are substantially and significantly less likely to own their own businesses as the result of market place discrimination than would be expected based upon their observable characteristics, including age, education, geographic location, and industry. We find that these groups also suffer substantial and significant earnings disadvantages relative to comparable White males, whether they work as employees or entrepreneurs.

Data from the Current Population Survey (CPS) and the Five Percent Public Use Microdata Samples (PUMS) from the 2000 decennial census are used to examine the incidence of minority and female business ownership (self-employment) and the earnings of minority and female business owners across the U.S. and within the Maryland region. The 2000 PUMS contains observations representing five percent of all U.S. housing units and the persons in them (approximately 14 million records), and provides the full range of population and housing information collected in the most recent census. Business ownership status is identified through the “class of worker” variable, which allows us to construct a detailed cross-sectional sample of individual business owners and their associated earnings. The CPS is the source of official government statistics on employment and unemployment and has been conducted monthly for over 40 years by the U.S. Census Bureau and the U.S. Department of Labor. Currently, about 56,500 households are interviewed monthly. Households are scientifically selected on the basis of residence to represent the nation as a whole, individual states, and large metropolitan areas.

Using the PUMS and the CPS we found:

That annual average wages for Blacks (both sexes) in 2000, both economy-wide and nationwide, were almost 30 percent lower than for White males who were otherwise similar in terms of geographic location, industry, age, and education. These differences are large and statistically significant. Large, negative, and statistically significant wage disparities were also observed for Hispanics, Asians, Native Americans, and White women. These disparities are consistent with the presence of market-wide discrimination. Observed disparities for these groups ranged from a low of -17 percent for Hispanics to a high of -36 percent for White women. Similar results were observed when the analysis was restricted to construction and A&E. That is, large, negative, and statistically significant wage disparities were observed for all minority groups and for White women. All wage and salary disparity analyses were then repeated using interaction terms designed to test whether observed disparities in Maryland were different enough from elsewhere in the country or the economy to alter any of the basic conclusions regarding wage and salary disparity. They were not.

This analysis demonstrates that minorities and women earn substantially and significantly less from their labors than their White male counterparts. Such disparities are symptoms of discrimination in the labor force that, in addition to its direct effect on workers, reduce the future availability of MBEs by stifling opportunities for minorities and women to progress through precisely those internal labor markets and occupational hierarchies that are most likely to lead to entrepreneurial opportunities. These disparities reflect more than mere “societal discrimination” because they demonstrate the nexus between discrimination in the job market and reduced entrepreneurial opportunities for minorities and women. Other things equal, these reduced entrepreneurial opportunities in turn lead to lower MBE availability levels than would be observed in a race- and sex-neutral marketplace.

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Next, we analyzed race and sex disparities in business owner earnings. We observed large, negative, and statistically significant business owner earnings disparities for Blacks, Hispanics, Asians, Native Americans, and White women consistent with the presence of discrimination in these markets. Large, negative, and statistically significant business owner earnings disparities were observed in the PUMS data for construction and A&E sector, as well for all groups but Asians. The CPS construction and A&E data showed large, negative and statistically significant business owner earnings disparities for Blacks, Hispanics, and White females. Coefficients for Asians and Native Americans in the CPS data were typically large and negative but not always statistically significant. As with the wage and salary disparity analysis, we enhanced our basic statistical model to test whether minority and female business owners in the Maryland region differed significantly enough from business owners elsewhere in the U.S. economy to alter any of our basic conclusions regarding disparity. They did not.

As was the case for wage and salary earners, minority and female entrepreneurs earned substantially and significantly less from their efforts than similarly situated White male entrepreneurs. These disparities are a symptom of discrimination in commercial markets that directly and adversely affects MBEs. Other things equal, if minorities and women cannot earn remuneration from their entrepreneurial efforts comparable to that of White males, growth rates will slow, business failure rates will increase, and as demonstrated in this Chapter, business formation rates will decrease. Combined, these phenomena result in lower MBE availability levels than would otherwise be observed in a race- and sex-neutral marketplace.

Next, we analyzed race and sex disparities in business formation. As with earnings, in almost every case we observed large, negative, and statistically significant disparities consistent with the presence of discrimination in these markets. For the economy as a whole, business formation rates for Blacks, Hispanics, and Native Americans were 9-34 percent lower than the corresponding White male business formation rate. For Asians, estimates ranged from 8 percent higher to 12 percent lower. For White women, business formation rates were estimated to be 9-12 percent lower. For the construction and A&E sector, business formation rates for Blacks, Hispanics, and Native Americans were 27-62 percent lower than the corresponding White male business formation rate. For Asians, estimates ranged from 12 percent higher to 42 percent lower. For White women, business formation rates were estimated to be 27-56 percent lower.

As a further check on the statistical findings in this Chapter, we examined evidence from the Census Bureau's *Survey of Business Owners and Self-Employed Persons* (SBO), formerly known as the *Surveys of Minority- and Women-Owned Business Enterprises* (SMWOBE). The SBO collects and disseminates data on the number, sales, employment, and payrolls of businesses owned by women and members of racial and ethnic minority groups, and has been conducted every five years since 1972. Using the SBO data, we calculated the percentage of firms in Maryland in 2002 that were minority-owned or female-owned and compared this to their corresponding share of sales and receipts in that year. We divided the latter by the former and multiplied the product by 100 to create a disparity ratio.

Disparity ratios of 80 percent or less indicate disparate impact consistent with business discrimination against minority-owned and female-owned firms. In Maryland, disparity ratios fall beneath the 80 percent threshold in every case examined. The most severe disparities are observed among Black-owned, Native American-owned, and female-owned firms. The 2002

SBO results also reveal that minority-owned and female-owned firms use significantly more employees per dollar of sales and have significantly higher payrolls per dollar of sales than do non-minority and male-owned firms. One explanation for this observation is that these firms respond to marketplace discrimination by, among other things, employing additional inputs in the production process in the form of more labor (per unit of sales) and higher labor compensation (per unit of sales). This economically rational response to discrimination ironically reinforces minorities' and women's competitive disadvantage in the public and private marketplaces where lowest cost is often a determining or determinative factor in the award of contracting and procurement opportunities.

### **3. Statistical Disparities in Capital Markets**

In Chapter VI, we analyze data from the National Survey of Small Business Finances (NSSBF) conducted by the Federal Reserve Board and the U.S. Small Business Administration, along with data from a survey we conducted in the Maryland region. The survey examined whether discrimination exists in the small business credit market. Discrimination in the credit market against minority-owned small businesses can have an important effect on the likelihood that such firms will succeed. Moreover, discrimination in the credit market might even prevent businesses from opening in the first place. This analysis has been held by the courts to be probative of an entity's compelling interest in remedying discrimination. We provide qualitative and quantitative evidence supporting the view that minority-owned firms, particularly Black-owned firms, suffer discrimination in this market.

The results are as follows:

- Minority-owned firms were particularly likely to report that they did not apply for a loan over the preceding three years because they feared the loan would be denied.
- When minority-owned firms did apply for a loan, their requests were substantially more likely to be denied than other groups, even after accounting for differences in factors like size and credit history.
- When minority-owned firms did receive a loan, they paid higher interest rates than comparable White-owned firms.
- Far more minority-owned firms report that credit market conditions are a serious concern than is the case for White-owned firms.
- A greater share of minority-owned firms believe that the availability of credit is the most important issue likely to confront the firm in the next 12 months.
- Judging from the analysis done using data from the NSSBF, there is no reason to believe that evidence of discrimination in the market for credit is different in Maryland than in the nation as a whole.

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- The evidence from our analysis of Maryland's geographic market area, taken from our Maryland Credit Survey, is entirely consistent with the results from the NSSBF.

We conclude that there is evidence of discrimination in Maryland in the small business credit market, particularly against Black-owned firms. We find little or no evidence, however, that White Females are discriminated against in this market.

### **4. MBE Public Sector Utilization versus Availability in Maryland's Contracting and Procurement Markets, 2000–2004**

Chapter VII presents the results of an analysis of the State of Maryland's contract and procurement spending, including associated first-tier subcontractors, subconsultants, and suppliers, awarded and substantially completed between Fiscal Year (FY) 2000 and Fiscal Year 2004. The following State agencies were included in our review:

- Department of Transportation (6 modal agencies plus the Secretary's Office)
- University System of Maryland (Univ. of MD at College Park plus 10 other campuses)
- Department of Budget and Management
- Department of General Services
- Department of Health and Mental Hygiene
- Department of Human Resources
- Department of Public Safety and Correctional Services
- Department of Juvenile Services
- Interagency Committee on Public School Construction
- Morgan State University
- Maryland State Lottery
- Maryland Stadium Authority

Prime contractors in the data were coded by their Standard Industry Classification (SIC) and zip code to determine the scope of the State's geographic and product contracting markets. Prime contractors were also coded by the race and sex of business ownership.

A stratified random sample of prime contracts was drawn from each of the above agencies. NERA engaged Bert Smith & Company Certified Public Accountants, to contact the prime contractors in the sample on behalf of the State and to collect information regarding the first-tier subcontractors, subconsultants, and suppliers, both MBE and non-MBE, used for the contracts in the sample. Subcontractor, subconsultant, and supplier data were assigned SIC codes and zip codes, and classified by race, ethnicity, and sex, in a manner analogous to that used for prime contracts.



The resulting database was used to calculate MBE utilization on State contracts and subcontracts over a five-year period compared to the availability statistics produced in Chapter IV. Table B provides a top-level summary of utilization findings for the Study.

**Table B. MBE Utilization in State of Maryland Contracting and Procurement, 2000-2005**

MBE Type	Procurement Category						
	Constr. (%)	AE-CRS (%)	CSE (%)	IT (%)	Maint. (%)	Services (%)	Overall (%)
Black	3.57	2.32	1.50	0.34	12.53	3.82	3.48
Hispanic	2.28	0.50	10.13	0.01	2.18	0.04	2.48
Asian	1.93	15.78	0.39	3.56	0.76	0.22	2.14
Native American	0.15	0.87	0.32	3.95	0.28	0.01	0.33
Minority total	7.94	19.47	12.34	7.86	15.76	4.09	8.44
White Females	7.87	5.05	3.12	1.87	18.62	4.44	6.36
MBE Total	15.81	24.52	15.46	9.74	34.38	8.53	14.79
Non-MBE Total	84.19	75.48	84.54	90.26	65.62	91.47	85.21
Total (%)	100.00	100.00	100.00	100.00	100.00	100.00	100.00
Total (\$)	\$4,411,550,975	\$499,798,243	\$1,008,519,276	\$323,249,710	\$272,100,761	\$2,055,644,094	\$8,570,863,060

Source: See Table 7.1

Next, we compared the State's and its prime contractors' use of MBEs to our measure of their availability levels in the relevant marketplaces. If MBE utilization is statistically significantly lower than measured availability in a given category we report this result as a disparity. Table C provides a top-level summary of our disparity findings for the Study. Overall and in general, we find strong evidence of disparity in the State of Maryland's own contracting and procurement activity, despite the presence of the State's MBE Program.

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**Table C. Overall Disparity Results—FY2000-FY2004**

Procurement Category / MBE Type	Utilization	Availability	Disparity Index	
<b>All Procurement</b>				
Black:	3.48	6.49	53.6	***
Hispanic	2.48	3.17	78.2	***
Asian	2.14	4.76	45.1	***
Native American	0.33	0.63	52.7	***
Minority total	8.44	15.05	56.0	***
White female	6.36	14.56	43.7	***
MBE total	14.79	29.61	50.0	***
<b>Construction</b>				
Black:	3.57	6.09	58.6	***
Hispanic	2.28	2.95	77.4	***
Asian	1.93	2.21	87.5	***
Native American	0.15	0.49	30.8	***
Minority total	7.94	11.75	67.6	***
White female	7.87	12.26	64.2	***
MBE total	15.81	24.00	65.9	***
<b>AE-CRS</b>				
Black:	2.32	5.80	40.0	***
Hispanic	0.50	2.79	17.9	***
Asian	15.78	7.22	218.5	N/A
Native American	0.87	0.45	194.7	N/A
Minority total	19.47	16.26	119.7	N/A
White female	5.05	12.20	41.4	***
MBE total	24.52	28.46	86.2	***
<b>CSE</b>				
Black:	1.50	6.91	21.6	***
Hispanic	10.13	3.43	295.3	N/A
Asian	0.39	7.49	5.3	***
Native American	0.32	0.81	39.2	***
Minority total	12.34	18.64	66.2	***
White female	3.12	16.60	18.8	***
MBE total	15.46	35.24	43.9	***
<b>IT</b>				
Black:	0.34	12.18	2.8	***
Hispanic	0.01	4.23	0.3	***
Asian	3.56	9.82	36.2	***
Native American	3.95	0.95	414.2	N/A
Minority total	7.86	27.18	28.9	***
White female	1.87	16.24	11.5	***
MBE total	9.74	43.42	22.4	***

Procurement Category / MBE Type	Utilization	Availability	Disparity Index	
<b>Maintenance</b>				
Black:	12.53	8.11	154.6	N/A
Hispanic	2.18	3.34	65.2	***
Asian	0.76	3.24	23.5	***
Native American	0.28	0.56	50.5	***
Minority total	15.76	15.26	103.3	N/A
White female	18.62	14.81	125.8	N/A
MBE total	34.38	30.06	114.4	N/A
<b>Services</b>				
Black:	3.82	6.15	62.1	**
Hispanic	0.04	3.39	1.2	***
Asian	0.22	6.42	3.5	***
Native American	0.01	0.80	0.9	***
Minority total	4.09	16.76	24.4	***
White female	4.44	17.66	25.1	***
MBE total	8.53	34.42	24.8	***

Source: See Table 7.9.

Note: “\*” indicates an adverse disparity that is statistically significant at the 10% level or better. “\*\*\*” indicates the disparity is significant at a 5% level or better. “\*\*\*\*” indicates significance at a 1% level or better. “N/A” indicates that no adverse disparity was observed in that category.

## C. Anecdotal Evidence

### 1. Anecdotal Evidence of Disparities in Maryland’s Marketplace

Chapter VIII presents the results of a large scale mail survey we conducted of both MBEs and non-MBEs about their experiences and difficulties involved in obtaining contracts. The purpose of this survey was to quantify and compare anecdotal evidence on the experiences of MBEs and non-MBEs as a method to examine whether any differences might be due to discrimination.

We mailed MBE and non-MBE questionnaires to a random sample of firms in Maryland’s geographic market area. We asked about bid requirements and other factors (bonding and insurance requirements, etc.) affecting their ability to obtain contracts. The questionnaires also asked for characteristics of the firms and the owners, such as the number of years the firm has been in business, the number of employees, firm revenues, and the education level of the primary owner. The MBE questionnaire also asked firms whether they experienced disparate treatment in various business dealings (such as commercial loan applications and obtaining price quotes from suppliers or subcontractors) in the past five years due to their race or gender and how often prime contractors who use them as subcontractors on public-sector projects with MBE goals also solicit or use them on public-sector or private-sector projects without such goals.

Many survey respondents had done business or attempted to do business with the State or other public entities in Maryland in the past five years. The survey results showed that a large

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proportion of MBE respondents reported that they had been treated less favorably in various business dealings in the last five years. Moreover, in several categories, a larger fraction of MBEs than non-MBEs reported that various bid requirements and other factors made it harder or impossible to obtain contracts. Finally, the survey also demonstrated that prime contractors who use MBEs on public sector contracts with goals rarely hire, *or even solicit*, such firms on projects without goals, either public or private.

Chapter VIII also presents the results from a series of in-depth personal interviews conducted with MBE and non-MBE business owners in mid-2005. The purpose of these interviews was much the same as the mail surveys. However, the longer interview length and more intimate interview setting were designed to allow for more in-depth responses from business owners. Similar to the survey responses, the interviews strongly suggest that MBEs continue to suffer discriminatory barriers to full and fair access to State and private sector contracts. Participants reported perceptions of MBE incompetence and being subject to higher performance standards; discrimination in access to commercial loans and surety bonds; paying higher prices for supplies than non-MBEs; inability to obtain public sector prime contracts; difficulties in receiving fair treatment in obtaining public sector subcontracts; and virtual exclusion from private sector opportunities to perform as either prime contractors as subcontractors, outside of IT services.

While not definitive proof that Maryland has a compelling interest in implementing race- and gender-conscious remedies for these impediments, the results of the surveys and the personal interviews are the types of anecdotal evidence that, especially in conjunction with the Study's extensive statistical evidence, the courts have found to be highly probative of whether the State would be a passive participant in a discriminatory market place without affirmative interventions.

## 2. MBE Program Analysis and Feedback Interviews

Chapter IX summarizes the principal race- and gender-neutral initiatives currently underway by the State of Maryland. These include preference programs for small businesses and a variety of outreach programs for small businesses in general and MBEs in particular. This overview of activities includes the Small Business Preference Program, the Governor's Office of Business Advocacy, the Maryland Small Business Development Financing Authority, the Small Business Reserve Program, the Governor's Office of Minority Affairs, and the Commission on Minority Business Enterprise Reform.

Next, Chapter IX provides historical background on the State's MBE Program and a discussion of the operations of the current MBE Program. NERA contacted numerous State agency personnel and business owners to solicit their feedback regarding the MBE Program.

The remainder of Chapter IX presents a summary of our interviews, which covered the following subjects:

- Program eligibility

In general, MBEs supported the continued eligibility of Blacks, Hispanics, Asians and White women. Some non-MBEs, however, stated that the Program had become too broad by

including groups other than Blacks. Some specialty trade firms were concerned that White women enjoy competitive advantages through the Program not warranted by any past or current discrimination.

Some non-MBEs also urged a limit to the number of years a firm can participate in the Program. However, the DBEs that had graduated from the USDOT Program reported that they received little or no work after graduation.

- The MBE certification process

There were few criticisms of the certification process. Some White women recounted that they had difficulty obtaining certification because of the role of their husbands in the firm's day-to-day operations. Some construction firms expressed concerns about women-owned "front" companies.

- MBE contract goal setting

Non-MBE prime contractors generally felt that the goals were too high or unrealistic. Several mentioned in particular the difficulty of meeting the goal for Blacks, especially for engineering contracts. Further, many prime vendors objected to having to subcontract work that they would prefer to self-perform. This was especially true for specialty construction firms, who recounted having to subcontract work to direct competitors. They urged a review of whether there is an "overconcentration" in some trades of MBEs, such that no goals should be set for those scopes of work. Some firms suggested that no goals be set on smaller contracts, where there are few opportunities for subcontracting, and that lower goals be set for very large contracts, where there are few MBEs capable of performing large subcontracts.

Non-MBE prime bidders outside of construction contracting often found it difficult to meet subcontracting goals, because their industries are not based upon the prime contractor/subcontractor model. MBEs and non-MBEs expressed frustration that minorities and women are often relegated to those ancillary aspects of professional services projects that can be carved out for subcontracting.

Some Asian-owned firms objected to setting separate goals for Blacks and women, preferring the DBE approach of a single goal that can be met using any certified firm. On the other hand, Blacks were concerned that a unitary goal would lead to their receiving even less work.

- Bid evaluation and good faith efforts to meet goals

Prime contractors reported that meeting goals as often very burdensome. MBEs failed to respond or quoted unreasonably high prices. Waivers were felt to be actively discouraged by the State, and difficult to obtain. Many felt system is set up to play "gotcha." MBEs, however, felt that there was ample availability of certified firms to meet goals.

Both groups agreed that more detailed firm profiles and guidance about good faith efforts to meet goals would improve the Program. There was also the consensus that task order

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contracts and indefinite deliver/indefinite quantity contracts were especially problematic. The prime bidders do not know how much work they will have and so find it hard to commit to making the goals, and the MBEs do not know how much work they will receive, if any, and so find it hard to schedule their forces.

- MBEs' efforts to seek work as prime State contractors,

MBEs found it very difficult to obtain prime State contracts, primarily because of the size of the procurements. The Small Business Reserve Program was a good first step, but many firms believe the size thresholds are too low. There was also concern about high experience, bonding and insurance requirements that MBEs cannot meet.

- MBEs' efforts to seek work on private sector contracts

With few exceptions, MBEs reported that firms that solicit and use them on projects with affirmative action goals rarely or never do so on projects without goals. A few MBEs providing professional services had some success in the private sector, particularly in the IT segment. A few construction firms had received work on smaller commercial and residential projects. Overall, however, most MBEs felt that the Program and those of other local governments were vital to their survival because of the lack of private sector opportunities.

- Contract performance and MBE Program enforcement

There was universal concern about adequate Program monitoring. Some MBEs reported being substituted on projects without their knowledge. There were also doubts about whether all MBEs perform a commercially useful function or are listed to meet goals then dropped. Several MBEs stated that there has been some improvement since the Lieutenant Governor's Task Force recommendation, but more resources are needed. On the other hand, some non-MBE construction contractors felt it is too difficult to substitute non-performing MBEs, and time lost is charged against the prime contractor.

- Support services for MBEs

There was broad consensus that more support services are needed. MBEs and non-MBEs mentioned that assistance with bidding, bonding, financing, marketing, etc. would enhance MBEs' capabilities. One stop shopping for MBE services and procurement information was also repeatedly suggested.

- Payment

Many firms complained about slow payment, either from the State to the prime vendor or from the prime vendor to the subcontractor. Firms were unaware of the recent adoption by Maryland of electronic funds transfers.

- Discrimination complaint procedures

Few MBEs had filed complaints, fearing retaliation.

- MBE Liaisons' roles and responsibilities

MBEs felt that the Liaisons, while committed and well intentioned, often lacked the information or the power to resolve problems. This view was shared in large degree by State personnel. At many agencies, employees have multiple responsibilities, which lessens the focus on MBE issues and contract compliance. Staff is therefore usually reactive rather than proactive, especially outside of construction. It would help to merge existing databases of firms, as well to install compliance tracking software.

- Maryland's race- and gender-neutral programs

Many MBEs had little awareness of the State's extensive programs to assist small businesses. There was solid support for the Small Business Reserve Program, which many firms felt should be expanded. State personnel were cautious, however, about whether too expansive a definition of "small" would merely increase the administrative burden of unbundling contracts without the commensurate benefit of creating opportunities for MBEs.

### **D. Recommendations**

Chapter X presents our principal recommendations for the consideration of State policy makers, based on the present state of the case law and our findings in this Study.

This Study presents a large variety of statistical evidence, virtually all of which points to a past and continuing presence of business discrimination in Maryland's principal geographic and product markets for contracting and procurement. Statistical findings of disparities for Blacks, Hispanics, Asians, Native Americans and White females were made from a number of primary data sources and high quality secondary data sources. Statistical findings of the Study are buttressed by numerous anecdotal reports of disparate treatment and other barriers to MBE participation in business enterprise opportunities in Maryland.

Data sources examined for this Study included a custom-made directory of directories for MBEs; Dun & Bradstreet *MarketPlace* data for the State's geographic and product markets; a large-scale telephone survey of business owner race and sex attributes; 2000 Decennial Census data; Current Population Survey data for 1979-2002; Survey of Business Owners data from 2002; National Survey of Small Business Finances data from 1993 and 1998; a large-scale mail survey of MBE and non-MBE access to commercial credit and capital; a large-scale mail survey of MBE and non-MBE business owner experiences; and numerous personal interviews with MBEs, non-MBEs, State MBE program personnel, and State contracting/procurement personnel.





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